Feature Section

IN THE FALL of 1971, a French obstetrician named Frederick LeBoyer published a book called *Birth Without Violence*. In his book, Dr. LeBoyer described his reasons for changing his technique of delivering a child. He felt that after an infant had been folded up for nine months, gently floating in the dark, it was certainly a shock to explode suddenly into a world of bright, glaring lights, loud noises and new surroundings. He began to develop a method of delivering a child into a darkened room, placing the infant on the mother's abdomen and allowing the child to make a slow transition into the world as he would soon know it. He also combined this technique with a warm bath given to the infant after completion of the delivery. He felt very strongly about the bonding effect of having an infant on the mother's abdomen with the head of the infant against the heart of the mother, allowing the infant to hear the familiar heartbeat.

Since 1971 I have read many books about obstetrics, but none has affected me more than this small book by Frederick LeBoyer.

The Infant as a Person

I recall that the most fascinating aspect of the method to me was the idea that the infant is a human being with feelings and emotions which perhaps we have overlooked for many years. For some time now, I have felt that the actual moment of birth is an event to be treated with awe.

As soon as the lights are made very soft in the delivery room, the scene takes on a calmness one can feel. I personally use the viewing box X-ray light which illuminates the room well enough to carry out all normal functions and yet is not bright enough to cause the infant to close his eyes. I feel that a delivery is not routine, the couple is not routine and the baby is not routine. All are unique and the moment of this birth will never happen again.

To me, it is sad to see so many of my bright colleagues go out of their way to criticize a simple idea. LeBoyer is not advocating that *all* babies be delivered exactly the way he de-

Gentle Birth

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SUMMARY

No delivery of a baby is routine—each birth is a special event. For the large percentage of normal deliveries, a more human, personal approach can be taken, providing this is what the couple and the doctor feel comfortable with. This article outlines one approach based on the LeBoyer method of slow delivery in a darkened room. (Can Fam Physician 24: 1186-1188, 1978).

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livers them. He is trying to slow down the moment of impact into this world. The way you do it is up to you. Surely we all realize that a child eventually must hear strange noises and also must adapt to bright light, but why do we have to rush it? Why do we have to rush everything in life?

The average child spends 267 days inside a dark pulsating world of warmth. He knows the familiar sounds of his mother. He knows of warm liquid and the velvet lining of the amniotic membranes. His lungs are filled with liquid and soon he will breathe air for the first time. Once his lungs have filled with air and his chest is rising and dropping rhythmically, why must we rush the separation from his mother? Why must we unfold his fetal position before he is ready?

Adapting LeBoyer's Technique

I attempt to integrate LeBoyer's ideas within a standard hospital delivery. Every physician has the right to deliver an infant by a method that he feels comfortable with. If the method I use caused harm to mother or infant, I would alter my thinking. For a mother or infant in distress, this method has no place in proper surgical intervention, but what about all the normal deliveries?

In his method of delivery, LeBoyer does not drape the patient's abdomen or legs. He also does not use gloves or mask. Again, each physician must do what he feels is best for his patients. I personally feel that great obstetricians in the past, such as Semmelweis, gave their whole lives to help show that infection from physician to patient is a real threat. While I do not feel that the maternal abdomen will infect the infant, I do feel that I might, therefore I wear gloves and a mask.

When the patient is on the delivery room table, I have the labor nurse quietly prepare a warm bath. I use two large bottles of sterile water, both heated to 32 C. LeBoyer uses a large aquarium type tank to bathe the child in; however, I have found that the portable instrument bowl serves just as well.

I now instruct the nurses to put all the lights off in the delivery room except the two X-ray lights on the back wall. These lights are sufficient for easy vision and safe delivery. The fetal heart has not dropped, there is no meconium and all is normal.

As the infant's head begins to crown at the perineum it becomes obvious that the mother will require a small midline episiotomy to prevent vaginal tearing; however, I avoid episiotomy wherever possible.

With a modified Ritgen maneuver, the head of the child is delivered and with gentle traction towards the floor the anterior shoulder soon follows. At this point, the nurse is quietly instructed to give an intramuscular injection of Pitocin which will allow the uterus to contract down and will usually prevent postpartum hemorrhage. All is relaxed now, the largest diameter has already been delivered and the infant has not taken its first breath. At this point, I suction the infant's mouth and nostrils. This is another point of departure from LeBoyer, who delivers the infant and then immediately places the child on the mother's abdomen, allowing natural drainage with the infant in the head-down position. I feel strongly that the first moment or two of life should be under the direct observation of the physician. Therefore, once I am satisifed that the nose and throat are clear of mucus, I cradle the infant as it slowly moves out of the vagina and into my arms. I do not unfold the infant and I do not hang the child upside down. The spine has been curved for nine months and I feel it should stay curved until the infant is ready to unfold itself.

The basin of water is now placed between the mother's legs and the baby is placed gently in the water, while the cord is clamped. LeBoyer bathes the baby after the delivery is completed and does not clamp the cord until it has finished pulsating; this I am sure allows for a very relaxed time for the infant. However, I do not feel comfortable in placing the child immediately on the mother's abdomen. While I agree that the child would do well to receive two sources of oxygen—one from the cord and one from his lungs—I do not feel that this process is facilitated by having the infant on the abdomen above the placenta. With somewhat of a reservoir effect, the blood may in fact be retrograde; the oxygen and blood may indeed not reach the infant and cause the desired effects. I therefore feel the infant should be at the level of the placenta, or lower. My reasoning behind clamping the cord once the infant's lungs are working is the fact that if the infant receives an extra volume of blood, neonatal jaundice may be increased.

The suction machine is now turned off and the only sounds are those made by the baby and his parents. There is an initial cry to clear the lungs, but then there seems to be a calm. There is no screaming and crying as ordinarily heard in the delivery room. We have always felt that the child who is yelling is a healthy infant. LeBoyer feels that this is a very frightened human being who has been delivered into a fearful world of light, noise and sounds so that its only response is one of crying and terror with its eyes tightly closed. It would be similar to being locked in a closet for nine months and being released with a flashlight shining in your eyes.

Once I am satisfied that the child is relaxed and the chest is rising and dropping slowly, that the heartbeat is palpable and strong, I feel confident that this infant can now be placed on its mother's chest. This is perhaps the strongest reason I continue to use the techniques suggested by LeBoyer. This moment of bonding that takes place between the infant and the parents seems to be the most important advantage of this type of delivery.

Breaking Routine

A great deal of rigid routine has been broken in this method. Many doctors are horrified at the idea of doing a delivery in a darkened room, but this does not mean one cannot see. There is ample light from the glow of the X-ray viewing box to see all that is necessary for actual delivery of the infant. The position of the head is palpated and the suture lines will give us all the information we need. An episiotomy incision can also be done with minimal light.

If mid forceps are necessary to complete the delivery because the mother has an inadequate pelvis, obviously I cannot continue with this gentle method of delivery. I feel that an infant delivered from the mid pelvis with forceps will likely be benefited by oxygen because it is likely to have bradycardia with the fetal head pressure. Therefore if I cannot see the fetal head at the time of delivery I switch to the more conventional method of delivery.

I explain to the couple that the child's progress has stopped and for medical reasons, I will change the delivery method. Obviously, a cesarean section would fall into this category. Another factor which would dictate against this method would be the presence of any signs of fetal distress during labor. Therefore, bradycardia, tachycardia and meconium are all contraindications to a LeBoyer method of delivery, as are breech deliveries. Certainly a premature infant would never be delivered by this method because of the extra precautions needed.

I realize that an Apgar score cannot be accurately given to an infant when one cannot see whether or not the child is pink; but surely a child whose chest is rising and dropping slowly with no respiratory distress can be accurately assessed as being well in his first minute of life. Also at this point, it is obvious that a child who is limp and having trouble breathing can be handed to the anesthetist who is standing by to administer oxygen or perhaps intubation, if needed. I do not feel every child requires oxygen at the time of delivery.

The look in a couple's eyes at the moment of first contact with their baby is the reason for all the preparation. No matter whether or not we believe that we have brought a child into the world who will become a great person or an ordinary individual, no one can take away that first moment. It could have all been lost in routine, but it is now a lasting memory. The baby very often will open his eyes and look directly into his parents' faces. True, the child cannot see distinct features, yet it recognizes the voice and feels the warm hands holding it beneath the warm towel. A preheated blanket now covers the infant while he is being held by his parents. This will help keep the baby's temperature stable and will protect him from any cold stress.

After the Birth

The couple is left alone now with their child and I can return my attention (with a new pair of gloves) to the delivery of the placenta and the sewing of the episiotomy. A small overhead operating light is now directed on the vaginal opening and this allows me to examine the cervix and vagina in order to sew up the episiotomy with a fine absorbable suture.

After the episiotomy is completed the husband and I change out of our greens and the mother and child return to the recovery room. The husband is then taken to the recovery room where the three of them will be left alone. At this time, the mother may breastfeed the baby if she wishes. Following this the child will be taken to the nursery for its official weigh-in and the couple will be taken to the postpartum floor where rooming-in arrangements will be made.

For me there has been ample reason to know that what I have done has been right for this couple and myself, as well as the baby. However, I realize many doctors are critical of this method and I feel these critics deserve answers. It is true that all medical knowledge has required time-honored proof before it is accepted by doctors. But how are we to gather this new knowledge? Some of us must embark on new methods of delivery before we can accept our present method as being really the best for the infants we deliver.

Follow Up

I keep records of all infants delivered in this way. Skin temperature is taken upon arrival at the nursery. The bilirubin levels are followed separately and compared with those of infants delivered by the conventional methods. To date, I have seen no adverse effects in babies delivered 'gently'.

I intend to tabulate all such deliveries over a five year period and compare results. Another stage of documentation will be the growth and development of children so delivered, noting ages of standing, walking and talking. This, however, is a very subjective approach and may be somewhat biased by the enthusiastic parents. Another aspect which will tend to make these children perform earlier is parental involvement, which, in this group of couples, is very high. On the other hand, school achievement will be more objective and will make an interesting follow-up in ten years.

According to LeBoyer, these children do perform at a higher level of achievement. Obviously, the high degree of parental involvement has something to do with this, but the method of delivery certainly enhances parental involvement to begin with.

Conclusion

This method is definitely not right for all women. Many know nothing of the method, or know of it yet feel that it is not for them. I rarely suggest this method to any couple—the feeling and request usually come from them.

Couples requesting the LeBoyer technique, I feel, are expressing their own individual feelings about the delivery of their child. A doctor, on the other hand, is also an individual with a right to do deliveries the way he feels best. The couples I have cared for with this method are usually well-read people and know that a doctor delivering their child in a hospital is the safest method. What they fear, however, is that the love and personal aspect of the relationship that formed the child in the first place will be lost in the impersonal routines of a hospital setting. This method gives the ultimate start *they* want for *their* child. We all need love and affection—even with our first breath.